

TWO NEW PHILIPPINE SUBSPECIES OF THE CRIMSON-BREASTED BARBET (AVES: CAPITONIDAE)

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Abstract.—The red-throated populations of the Crimson-breasted Barbet (*Megalaima haemacephala*) of the central islands of the Philippines are all currently assigned to the subspecies *intermedia* (Shelley, 1891). Geographic variation in these islands permits recognition of three subspecies: *M. h. intermedia* (Negros, Panay); *M. h. cebuensis*, n. subsp. (Cebu); and *M. h. homochroa* n. subsp. (Tablas and probably Romblon). A lectotype from Negros is designated for *M. h. intermedia*. Status of the populations on Guimaras and Masbate is uncertain.

The Philippine populations of the polytypic Crimson-breasted or Coppersmith Barbet (*Megalaima haemacephala*) can be divided into two groups: those of the northern, eastern, and southern islands, in which the throat and stripes above and below the eye are yellow; and those of the central islands, in which the plumage of those areas is red. DuPont (1971) recognized three subspecies of the yellow-throated group, but no one has proposed the subdivision of the red-throated group. All barbets from the central islands of Cebu, Guimaras, Masbate, Negros, Panay, Romblon, and Tablas are currently assigned to the subspecies *M. h. intermedia* (Shelley, 1891).

In 1894, only three years after Shelley (1891) had described *intermedia*, Bourns and Worcester (1894:51) noted what appeared to be interisland variation in their series of specimens from Cebu, Negros, and Tablas. Part of Bourns and Worcester's series, now in the Carnegie Museum of Natural History, seemed to confirm their findings, so we borrowed further material, including most of the rest of the Bourns and Worcester specimens, to examine the alleged variation more closely.

We measured all specimens and found no differences between island populations in wing length, bill length, or bill width; so many specimens had badly worn or molting rectrices that tail measurements could not be fully evaluated; however, we believe that the populations probably do not differ significantly in tail length. We evaluated the following color characters: (1) color of the red of the throat; (2) extent of black on stripes along lateral borders of the red throat; (3) color of the wash on these lateral stripes; (4) size of yellow patches at sides of lower throat; (5) color and extent of yellow band across upper breast; (6) amount of yellow mixed with the red in the stripes above and below eye; (7) color of the red of the crown; (8) extent of black on occiput and nape; (9) color of wash on that black; (10) shade of green on back and wings; (11) presence or absence of orange tinge on tertials; (12) shade of green on tail.

Bourns and Worcester (1894) described their Cebu series as having "light edgings to feathers of the upper surface," lacking in their specimens from Negros and Tablas. This difference is indeed present, but is of seasonal rather than geographic significance, as it is due to feather wear. Cebu specimens taken in June and July show the light edgings, whereas three adult specimens taken in November (DMNH) do not have them. Furthermore, they are conspicuous in a worn May specimen from Negros (FMNH).

Evaluation of the other color characters listed above indicates that there is indeed geographically correlated variation within the central islands, such that three rather than only one subspecies can be defined in this area.

Shelley (1891) listed specimens from Negros and Cebu when he described *intermedia*, but did not designate a holotype. As Negros and Cebu populations differ (see beyond), we had to determine which population should bear Shelley's name. Hachisuka (1934:229) gave the type locality of *intermedia* as Negros, which can be accepted as a restriction (although Hachisuka erred in stating that the type was in the Rothschild collection in the American Museum of Natural History). Warren (1966), in accordance with her policy in her catalogue of bird type specimens in the British Museum (Natural History), listed only one of the syntypes (specimen 1888.11.24.337, an adult male from Negros), which has been placed in the segregated type series in the BM(NH). She specifically stated in her introduction that listing of a syntype in this catalogue did not constitute designation of a lectotype. As the syntypical series of *intermedia* is a composite, in order to stabilize the nomenclature of this species we formally designate BM(NH) 1888.11.25.337 as the lectotype of *Xantholaema intermedia* Shelley, 1891.

Two specimens from Panay (DMNH) are badly worn, but appear to agree well with Negros birds except that their crowns are of a slightly more orange red than most of the Negros series. On its museum label, FMNH 11099 from the Steere collection is attributed to "Siquijor"; however, this is based on a misreading of the scrawled locality "San Antonio" (a town in Negros) on the original label. No barbet has been collected on Siquijor (Rand and Rabor 1960).

Sexual dimorphism in these barbets is slight. Females tend to have the red of the crown and throat somewhat less intense, and to have more admixture of yellow feathers in the red of the mid- and lower throat and the facial stripes.

Megalaima haemacephala cebuensis, new subspecies

Holotype.—National Museum of Natural History 315155, adult male, collected 21 Jun 1892 at Toledo, Cebu Island, Philippines, by D. C. Worcester and F. S. Bourns (collectors' no. 984).

Subspecific characters.—Differs from *intermedia* of Negros in the greater extent of black (as opposed to green or bluish green) on the sides of the throat and on the occiput and nape. The red of the stripes above and below the eye is more mixed with yellow, sex for sex. There is a distinct yellow spot at the posterolateral corners of the red throat patch; in extreme female specimens (USNM 315156, DMNH 1814) this yellow spot is extended medially, forming a yellow band at the posterior edge of the throat. In *intermedia* there are no more than one to four yellow feathers, if any, in the corners of the throat patch.

Range.—Known only from Cebu Island, Philippines.

Etymology.—Named for the island it inhabits.

Megalaima haemacephala homochroa, new subspecies

Holotype.—Carnegie Museum of Natural History 137984, adult female, collected 23 Sep 1892 at Badajos, Tablas Island, Philippines, by D. C. Worcester and F. S. Bourns (collectors' no. 962).

Subspecific characters.—In general, duller and more uniform in color than *intermedia* and *cebuensis*. The red of the crown and throat is less brilliant, sex for

sex, in *homochroa*. In *intermedia* and *cebuensis* the black of the nape and occiput is washed with varying amounts of blue-green to blue-gray; in *homochroa* this wash is green, similar to (but slightly less yellowish than) the green of the back. The tertials scarcely contrast with the back color, whereas in *intermedia* and *cebuensis* these feathers, in good light, have a tinge of dark orange and contrast with the green back. Similarly, the tail of *homochroa* is of the same dull green as the back, whereas in the other two races the tail is a richer, less yellowish green than the back. The black of the sides of the throat is washed with olive-green rather than with blue-green or blue-gray as in *intermedia* and (to a lesser extent) *cebuensis*. The yellow band across the upper breast tends to be more diffuse in *homochroa*, blending more gradually with the pale yellow or whitish ground color of the more posterior underparts, whereas the yellow of this area tends to be more sharply defined in *cebuensis* and *intermedia*. In the latter subspecies, the yellow area is richer, tending toward an orange color without counterpart in *homochroa*. The yellow spots at the posterior corners of the throat patch are reduced or absent, as in *intermedia*.

Range.—Known at present from Tablas Island, Philippines (see below).

Etymology.—The name, from the Greek *homos*, same or uniform, and *chroa*, surface of the body or skin color, refers to the relative uniformity of color of the upperparts of this subspecies.

Remarks.—We have examined two specimens from the island of Guimaras (AMNH, CM). The geographic position of Guimaras, between Negros and Panay, suggests that the barbets of this island should be *intermedia*, and the AMNH specimen does, indeed, match a Negros series. The CM specimen, however, resembles *homochroa* in all characters. A larger series from Guimaras must be examined before the true characteristics of the barbet population of this island can be determined. We have not seen specimens from the islands of Romblon and Masbate. Those of Romblon are almost certainly *homochroa*, as the avifauna of that island is virtually identical with that of Tablas. Masbate is closer to Panay than to any other island inhabited by the red-throated group of subspecies, but is even closer to islands occupied by yellow-throated populations, so the examination of specimens from Masbate would be highly desirable. The only specimens of this species known to us from Romblon and Masbate were those collected by McGregor. These were destroyed in the burning of the National Museum of the Philippines during the battle for Manila in World War II.

Specimens examined.—*M. h. intermedia*: Negros, 12 (AMNH), 9 (FMNH), 4 (DMNH); Panay, 2 (DMNH). *M. h. cebuensis*: Cebu, 5 (DMNH), 5 (USNM), 1 (CM), 1 (FMNH). *M. h. homochroa*: Tablas, 5 (USNM), 3 (CM), 2 (FMNH). *M. h. subsp.*: Guimaras, 1 (CM), 1 (AMNH).

Acknowledgments

Specimens to supplement the small series in the Carnegie Museum of Natural History (CM) were borrowed from the National Museum of Natural History (USNM), Field Museum of Natural History (FMNH), and Delaware Museum of Natural History (DMNH). Specimens at the American Museum of Natural History (AMNH) were examined in situ by Parkes. We are indebted to the curators of these museums for permission to study their specimens.

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